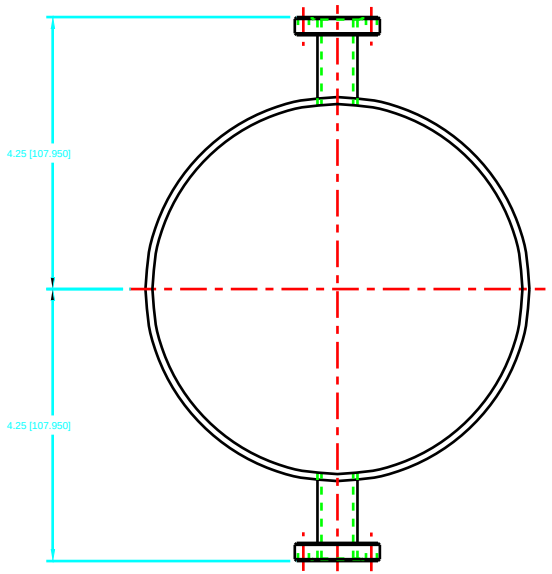
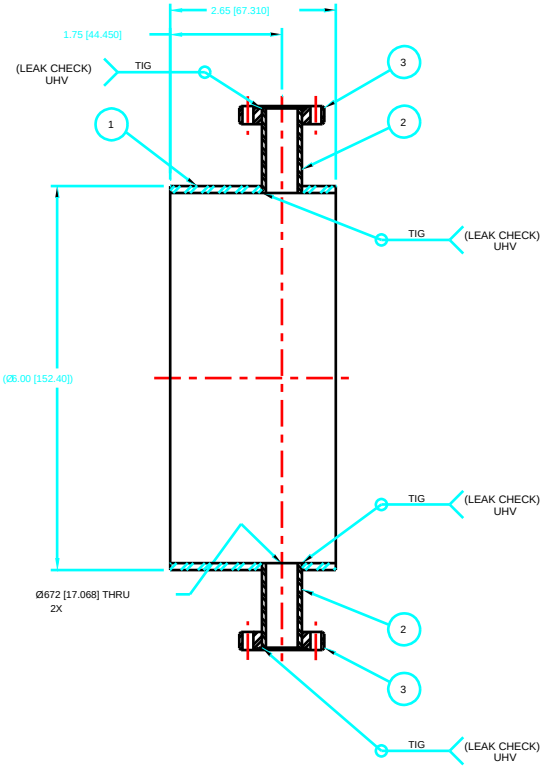
(D)	PLOT SCALE: 1=1	DWG. SCALE: 1	





NOTES:

1. THIS IS A ULTRA-HIGH VACUUM COMPONENT (UHV).
2. WHEN MACHINING VACUUM PARTS, US OF SILICONE AND SULPHUR-BASED CUTTING FLUIDS IS PROHIBITED. USE ONE OF THE FOLLOWING:
   - A) CIMCOOL 5 STAR 49
   - B) TRIM SOL
3. ELECTROPOLISHING IS NEEDED BEFORE WELDING. PRIOR TO ELECTROPOLISHING THE COMPONENT NEEDS TO GO THRU A MULTIPLE STEP CLEANING PROCESS INVOLVING DEGREASING, WASHING, AND DRY NITROGEN BLOWDOWN. THE CHAMBER VACUUM SIDE SURFACE ROUGHNESS SHALL BE BETTER THAN 63 MICROINCH RMS AFTER ELECTROPOLISHING.
4. USING A MASS SPECTROMETER WITH MINIMUM SENSITIVITY FOR HELIUM OF 2 x 10 STANDARD CC/SEC PER LEAK METER DIVISION, SUCH AS:
   - ALCATEL ASM-11OTCL
   - VARIAN NCR 925 OR 936
   - VEECO MS-9, MS-90 OR MS-18
   - DuPONT CEC 24-120B

   CALIBRATION OF THE LEAK DETECTOR SENSITIVITY SHALL BE PERFORMED JUST PRIOR TO TESTING. FINAL TEST WILL CONSIST OF SURROUNDING THE CHAMBER (BAGGING) WITH HELIUM. THE CHAMBER WILL BE REJECTED IF A 2% DEFLECTION IN THE MOST SENSITIVE RANGE OF THE LEAK DETECTOR IS SENSED WITHIN 1 MIN.
5. KEEP THE PART CLEAN AND WRAP FOR UHV PACKING WITH ALUMINUM FOIL.
6. ALL DIMENSIONS WITH [ ] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY.

SOURCE

1 MDC VACUUM PRODUCTS CORP.
23842 CABOT BOULEVARD
HAYWARD, CA. 94545-1651
(510)-887-6100

ITEM	DWG/PART NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY
3	MDC #110004	1.33" O.D. NOM. NON-ROTATABLE FLANGE	SST 304	2
2		TUBING Ø63 x .065 WALL CUT TO FIT	SST 304	2
1		TUBING Ø6.00 x .109 WALL x 2.59 LG.	SST 304	1

PARTS LIST

UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES
TOLERANCES
DECIMALS: .X ± .015, .XX ± .010, .XXX ± .005
ANGULAR: ± .25
SURFACE ROUGHNESS 125
REMOVE ALL BURRS AND BREAK SHARP EDGES .03 MAX.
SURFACE TEXTURE TO BE IN ACCORDANCE WITH LATEST ANSI B46.1
DIMENSIONING & TOLERANCING IN ACCORDANCE WITH LATEST ANSI Y14.5
DO NOT SCALE DRAWING

LOG NUMBER: A18752

THIS DRAWING IS THE PROPERTY OF
ARGONNE NATIONAL LABORATORY

DRAWN BY: R. KRAKORA	DATE: 5/94	CHIEF DESIGN ENGINEER: D. SHU	DATE: 6/27/94
CHECKED BY: J. CHANG	DATE: 6/26/94	GP LEADER: T. M. KUZAY	DATE: 6/28/94
DESIGNED: J. CHANG, R. KRAKORA	DATE: 5/94	PROJECT MGR.	
RESPONSIBLE ENGINEER: J. CHANG	DATE: 6/26/94	APPROVED/RELEASED	

MATERIAL: SEE ABOVE

TITLE: ADVANCED PHOTON SOURCE
P7 BM FIXED W/M/S
INTEGRAL SHUTTER
WHITE BEAM STOP
SUB-WELDMMENT

SCALE: 1:1
SIZE: D
SHEET: 1 of 1
DRAWING NUMBER: P4105090907-230102-00

SYM	CHANGE DESCRIPTION	BY	CHKD	DATE

REVISIONS